



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2022-0599; Project Identifier MCAI-2021-00456-A; Amendment 39-22222; AD 2022-22-07]

RIN 2120-AA64

Airworthiness Directives; Piaggio Aviation S.p.A. (type certificate previously held by Piaggio Aero Industries S.p.A.) Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Piaggio Aviation S.p.A. (type certificate previously held by Piaggio Aero Industries S.p.A.) (Piaggio) Model P-180 airplanes. This AD was prompted by mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI identifies the unsafe condition as corrosion in the bottom fuselage area of the cabin compartment due to inner and outer sides of fuselage skin panels of certain airplanes treated with the less effective primer. This AD requires repetitively inspecting the fuselage skin panels, visually inspecting the entire fuselage inner side skin if necessary, and taking any necessary corrective actions. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES:

AD Docket: You may examine the AD docket at regulations.gov under Docket No. FAA-2022-0599; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the MCAI, any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

Material Incorporated by Reference:

- For service information identified in this final rule, contact Piaggio Aviation S.p.A., P180 Customer Support, via Pionieri e Aviatori d'Italia, snc - 16154 Genoa, Italy; phone: +39 331 679 74 93; email: technicalsupport@piaggioaerospace.it.

- You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, MO 64106. For information on the availability of this material at the FAA, call (817) 222-5110. It is also available at regulations.gov under Docket No. FAA-2022-0599.

FOR FURTHER INFORMATION CONTACT: Mike Kiesov, Aviation Safety Engineer, FAA, General Aviation & Rotorcraft Section, International Validation Branch, 901 Locust, Room 301, Kansas City, MO 64106; phone: (816) 329-4144; email: mike.kiesov@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain serial-numbered Piaggio Model P-180 airplanes. The NPRM published in the *Federal Register* on June 17, 2022 (87 FR 36415). The NPRM was prompted by MCAI originated by the European Union Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union. EASA issued EASA AD 2021-0104, dated April 15, 2021 (referred to after this as “the MCAI”), to address the unsafe condition on certain serial-numbered Piaggio Model P.180 airplanes. The MCAI states:

Occurrences were reported where, during routine inspections, diffused corrosion was detected on the fuselage inner side skin in the area of the passenger cabin. Evidence indicates that the presence of undetected (infiltrated or condensed) water, trapped in between the inner surface of fuselage skin panels and the thermo-acoustic insulation panels, could have started a galvanic corrosion phenomenon, mainly in the bottom fuselage area of the cabin compartment. Fuselage skin panels of certain aeroplanes, delivered from 2009 to 2013, were treated with the first type of “chromate-free” primer, chemically not as effective against corrosion when compared to those containing chrome. The phenomenon has been observed on aeroplanes subjected to prolonged inactivity and not stored in a hangar, or those operating in an environment with high humidity and/or frequent heavy precipitation, combined with a possible deterioration of window sealing due to normal aging, wear and tear.

This condition, if not corrected, could affect the structural integrity of the fuselage.

To address this potential unsafe condition, Piaggio published the [Piaggio Service Bulletin (SB) 80-0405, Revision 0, dated March 15, 2021] SB to provide inspection instructions.

For the reason described above, this [EASA] AD requires repetitive inspections of each affected area and, if necessary, an additional visual inspection of the entire fuselage inner side skin and, depending on findings,

accomplishment of applicable repair. This [EASA] AD also requires reporting the inspection results to Piaggio.

You may examine the MCAI in the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2022-0599.

In the NPRM, the FAA proposed to require repetitively inspecting the fuselage skin panels, visually inspecting the entire fuselage inner side skin if necessary, and taking any necessary corrective actions. The FAA is issuing this AD to prevent degradation of the structural integrity of the fuselage. The unsafe condition, if not addressed, could lead to loss of control of the airplane.

Discussion of Final Airworthiness Directive

Comments

The FAA received a comment from one individual commenter. The following presents the comment received on the NPRM and the FAA's response to the comment.

Request Not to Require Repetitive 26-Month Inspection

An individual commenter requested the FAA not require a 26-month repetitive inspection as proposed in the NPRM. The commenter stated that all U.S. operators follow the Piaggio P.180 Avanti II Maintenance Manual (MM) inspection program in which these areas are already being inspected every 5 years and 3,600 flight hours. The commenter also asserted that there could be patch repairs for previously inspected and repaired areas, and that, if patch repairs are found with no corrosion in previously inspected areas, no further action should be required. Therefore, the commenter believes implementing the 26-month repetitive inspection is excessive.

The FAA partially agrees. The FAA does not agree that all U.S.-registered airplanes are required to comply with Chapter 5 of the MM, which is where the inspections referenced by the commenter are located. Owners and operators must only comply with the Airworthiness Limitations section of the MM (located in Chapter 4 of this MM), as well as 14 CFR part 43, unless the airplane is operated under 14 CFR part

135 and its operating specifications require it. In addition, if the fuselage panels affected by this AD are replaced as part of the corrective actions required by paragraph (g)(1) of this AD, the repetitive inspections in paragraph (g)(2)(ii) of this AD are not required. Corrosion found outside of the affected fuselage areas of this AD should be repaired; however, these repairs are not mandated by this AD. Only the fuselage areas defined in the referenced service bulletin are affected by this AD. If corrosion is found as a result of the inspections required by this AD, this would show that the primer coating is inadequate to protect the material from corrosion; therefore, the repetitive inspections in this AD are necessary. The EASA, as the state of design, determined that a repetitive inspection interval of not to exceed 660 hours time-in-service (TIS) or 26 months, whichever occurs first, is appropriate. The FAA has no data to dispute this specified criteria concerning the time-in-service or calendar-month inspection interval determination. The FAA does agree that if repairs were previously accomplished on the areas required to be inspected by this AD and no corrosion was found during the inspections required by paragraph (g)(1) of this AD, the repetitive inspections in paragraph (g)(2)(ii) of this AD are not required. The FAA has not changed this final rule as a result of this comment.

Conclusion

This product has been approved by the aviation authority of another country and is approved for operation in the United States. Pursuant to the FAA's bilateral agreement with this State of Design Authority, it has notified the FAA of the unsafe condition described in the MCAI referenced above. The FAA reviewed the relevant data, considered the comment received, and determined that air safety requires adopting this AD as proposed. Accordingly, the FAA is issuing this AD to address the unsafe condition on this product. Except for updating this AD to reflect that the type certificate holder changed from Piaggio Aero Industries S.p.A. to Piaggio Aviation S.p.A and changing the

term “fuselage wing skin panel” used in paragraph (g)(1) of the NPRM to “fuselage skin panel,” this AD is adopted as proposed in the NPRM. None of the changes increase the economic burden on any operator.

Related Service Information under 1 CFR Part 51

The FAA reviewed Piaggio SB 80-0405, Revision 0, dated March 15, 2021. This service information specifies procedures for inspecting the fuselage skin panels and inspecting the full inner fuselage skin. It also specifies repairing or replacing any parts where corrosion is found.

The FAA also reviewed Piaggio SB 80-0405, Revision 0, Errata Corrige No. 1, dated March 24, 2021, which addresses discrepancies identified in Piaggio SB 80-0405, Revision 0, dated March 15, 2021.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Differences Between this AD and the MCAI, Service Information, or NPRM

The MCAI allows credit for the fuselage inner skin inspection if previously done using Piaggio Aviation S.p.A. Temporary Revision No. 332 to Chapter 53-00-00 of Piaggio P.180 Avanti II MM, and this AD does not. The FAA will consider requests for an alternative method of compliance for this under paragraph (h) of this AD.

The MCAI specifies compliance times of 8 months and 12 months depending on when the P.180 Avanti II MM 3,600-flight-hour or 5-year inspection was accomplished. This AD has a 12-month compliance time for all airplanes because the 3,600-flight-hour and 5-year MM inspections are not required for all U.S. operators by FAA regulation.

The service information specifies contacting Piaggio for certain repair instructions, while this AD requires repair using a method approved by the FAA or EASA.

Costs of Compliance

The FAA estimates that this AD affects 14 airplanes of U.S. registry.

The FAA estimates the following costs to comply with this AD:

Estimated costs

Action	Labor Cost	Parts Cost	Cost per airplane	Cost on U.S. operators
Inspections	Up to 150 work-hours x \$85 per hour = \$12,750	\$2,360	Up to \$15,110	Up to \$211,540

The FAA estimates the following costs to do any necessary actions that may be required based on the results of the required inspections. The FAA has no way of estimating the number of airplanes that might need these actions:

On-condition costs

Action	Labor Cost	Parts Cost	Cost per airplane
Repair	Up to 80 work-hours x \$85 per hour = \$6,800	\$1,220	Up to \$8,020
Replace skin panel	Up to 250 work-hours x \$85 per hour = \$21,250	Up to \$12,200	Up to \$33,450
Reporting inspection results	1 work-hour x \$85 per hour = \$85	Not Applicable	\$1,190

Paperwork Reduction Act

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a currently valid OMB Control Number.

The OMB Control Number for this information collection is 2120-0056. Public reporting for this collection of information is estimated to be approximately 1 hour per response,

including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. All responses to this collection of information are mandatory. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to: Information Collection Clearance Officer, Federal Aviation Administration, 10101 Hillwood Parkway, Fort Worth, TX 76177-1524.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

(1) Is not a "significant regulatory action" under Executive Order 12866,

(2) Will not affect intrastate aviation in Alaska, and

(3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive:

2022-22-07 Piaggio Aviation S.p.A. (type certificate previously held by Piaggio Aero Industries S.p.A.): Amendment 39-22222; Docket No. FAA-2022-0599; Project Identifier MCAI-2021-00456-A.

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Piaggio Aviation S.p.A. (type certificate previously held by Piaggio Aero Industries S.p.A.) (Piaggio) Model P-180 airplanes, serial number (S/N) 1174 through 1214 inclusive and S/N 1218 through 1230 inclusive, certificated in any category.

(d) Subject

Joint Aircraft System Component (JASC) Code 5330, Fuselage Main, Plate/Skin.

(e) Unsafe Condition

This AD was prompted by mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI identifies the unsafe condition as corrosion in the bottom fuselage area of the cabin compartment due to inner and outer sides of fuselage skin panels treated with less effective primer. The FAA is issuing this AD to prevent degradation of the structural integrity of the fuselage. This condition, if not addressed, could lead to loss of control of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Required Actions

(1) Within 12 months after the effective date of this AD, do the applicable inspections and corrective actions on each fuselage skin panel in accordance with the Accomplishment Instructions, Part A, paragraphs (1) through (15) and (17) through (20), or Part A (Alternate Procedure), paragraphs (31) through (37), (41) through (43), (50) through (55), and (57) through (60), in Piaggio Service Bulletin 80-0405, Revision 0, dated March 15, 2021, as corrected by Piaggio Service Bulletin 80-0405, Revision 0, Errata Corrige No. 1, dated March 24, 2021 (Piaggio SB 80-0405), except for the following:

(i) You are not required to contact the manufacturer. Instead, for any repairs, use a method approved by the FAA or the European Union Aviation Safety Agency (EASA).

(ii) Where the steps in Part A or Part A (Alternate Procedure) reference Part B, you must follow the Accomplishment Instructions, Part B, paragraphs (82) through (86), (88), and (104) of Piaggio SB 80-0405.

(2) If, as part of the corrective actions required by paragraph (g)(1) of this AD, you repaired areas of the fuselage skin but did not replace the panels, do the following:

(i) Within 60 days after completing the actions required by paragraph (g)(1) of this AD, report the inspection results, including the information specified in the Confirmation Slip attached to Piaggio SB 80-0405, to Piaggio at technicalsupport@piaggioaerospace.it; and

(ii) Repeat the requirements of paragraph (g)(1) of this AD at intervals not to exceed 660 hours time-in-service (TIS) or 26 months, whichever occurs first.

(3) If, as part of the corrective actions required by paragraph (g)(1) of this AD, you replaced the panels, within 60 days after completing the actions required by paragraph (g)(1) of this AD, report the inspection results, including the information specified in the Confirmation Slip attached to Piaggio SB 80-0405, to Piaggio at technicalsupport@piaggioaerospace.it.

(4) If, during all of the inspections required by paragraph (g)(1) of this AD, there is no corrosion and no primer inconsistencies, no further action is required by this AD.

(h) Alternative Methods of Compliance (AMOCs)

(1) The Manager, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the International Validation Branch, mail it to the address identified in paragraph (i)(1) of this AD or email to: 9-AVS-AIR-730-AMOC@faa.gov. If mailing information, also submit information by email.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(i) Related Information

(1) For more information about this AD, contact Mike Kiesov, Aviation Safety Engineer, FAA, General Aviation & Rotorcraft Section, International Validation Branch, 901 Locust, Room 301, Kansas City, MO 64106; phone: (816) 329-4144; email: mike.kiesov@faa.gov.

(2) Refer to EASA AD 2021-0104, dated April 15, 2021, for more information. This EASA AD may be found in the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2022-0599.

(j) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Piaggio Service Bulletin 80-0405, Revision 0, dated March 15, 2021.

(ii) Piaggio Service Bulletin 80-0405, Revision 0, Errata Corrige No. 1, dated March 24, 2021.

(3) For service information identified in this AD, contact Piaggio Aviation S.p.A., P180 Customer Support, via Pionieri e Aviatori d'Italia, snc - 16154 Genoa, Italy; phone: +39 331 679 74 93; email: technicalsupport@piaggioaerospace.it.

(4) You may view this service information at FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, MO 64106. For information on the availability of this material at the FAA, call (817) 222-5110.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the

availability of this material at NARA, email: fr.inspection@nara.gov, or go to:

www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued on October 20, 2022.

Christina Underwood, Acting Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.

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